

83979-2

10-29-2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

29 OCT 2009

Frank E. Sabotka
Rotam North America, Inc.
c/o IPM Resources LLC
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Suite 105
Newtown, PA 18940

Subject: Label Amendment
Product Name: Rotam Diquat AG
EPA Registration Number: 83979-2
Submission Date: August 12, 2009
Decision Numbers: 418865

The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you make the following changes to the product labeling:

- 1) Reorder the statements in the First Aid box as follows:
If in eyes.....
If on skin or clothing.....
If inhaled.....
If swallowed.....
- 2) Delete all references to and instructions for aquatic application.
Note: The cited product does not included aquatic uses on its label and no data compensation offer was made.
- 3) Change the header "GENERAL PRODUCT INFORMATION" at the top of page 7 to "PRODUCT INFORMATION".
- 4) Change "use" to "used" in the second sentence under the Product Information header on page 7 to read "ROTAM DIQUAT AG can also be **used** as a general herbicide to control weeds in noncrop areas and nonbearing crops."
- 5) Under Spray Volumes on page 7, change "suggested" to "directed".
- 6) Per the RED, the Spray Drift Management section of the label must be revised to read as follows:

"SPRAY DRIFT MANAGEMENT
AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY
OF THE APPLICATOR AND THE GROWER."

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6 continued)

“The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

Aerial Drift Reduction Advisory Information

The following aerial drift advisory information must be contained in the product labeling: [This section is advisory in nature and does not supersede the mandatory label requirements.]

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE

Volume - Use high flow rate nozzles to apply the highest practical spray volume.

Nozzles with higher rated flows produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using lowdrift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

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BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

WIND

Drift potential is lowest between winds speeds of 3 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS

The pesticide should only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops).

- 7) Note: Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of

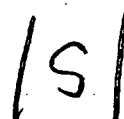
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statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Products shipped after 18 months from the date on this notice or the next printing of the label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. This label supercedes all previous accepted labels. As required, submit one copy of the final printed label before the product is released for shipment.

One copy of the label stamped "Accepted with Comments" is enclosed for your records. If you have any questions, please contact me or Michael Walsh by phone at (703) 308-2972 or via email at walsh.michael@epa.gov.

Sincerely,



Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Enclosure

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[Front Booklet Cover page]

Rotam Diquat AG

TO PREVENT ACCIDENTAL POISONING, NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS AND USE STRICTLY IN ACCORDANCE WITH ENTIRE LABEL.

Active Ingredient

Diquat dibromide [6,7-dihydrodipyrdo (1,2-a:2',1'-c) pyrazinedium dibromide].....	37.3%
Other Ingredients.....	62.7%
Total:	100.0%

Contains 2 lbs. diquat cation per gal. as 3.73 lbs. salt per gal.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements and Directions for Use inside booklet.

EPA Reg. No. 83979-2

EPA Est No. [tba]

Manufactured for:
Rotam North America, Inc.
1400 NW 107th Avenue, Suite 310
Miami, FL 33172
1-866-927-6826

**NET CONTENTS:
TBA**

**ACCEPTED
with COMMENTS
In EPA Letter Dated:
OCT 29 2009**
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

83979-2

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. <p>Call a poison control center or doctor for treatment advice.</p>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.</p>	
<p>HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call CHEMTREC 1-800-424-9300.</p>	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes, skin or clothing.

Personal Protective Equipment (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear

- Coveralls over long-sleeved shirt and long pants.
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.
- Chemical-resistant apron when cleaning equipment, mixing, or loading.
- A dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Mixers, loaders, and applicators using closed systems who meet these requirements may wear: long-sleeved shirt and long pants; protective eyewear; waterproof gloves; shoes plus socks; and a chemical-resistant apron when mixing, loading, or cleaning equipment. If handling tasks are performed from inside an enclosed cab or aircraft with enclosed cockpits that meet these requirements handlers may wear: long-sleeved shirt, long pants, shoes, and socks for the labeling-specified PPE. All labeling-specified PPE must be immediately available for use in an emergency. All applicable requirements as specified in 40 CFR 170.240(d)(4-6) must be followed.

User Safety Precautions
Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ROTAM NORTH AMERICA, INC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ROTAM NORTH AMERICA, INC and Seller harmless for any claims relating to such factors.

ROTAM NORTH AMERICA, INC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent consistent with applicable law, this warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ROTAM NORTH AMERICA, INC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ROTAM NORTH AMERICA, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, in no event shall ROTAM NORTH AMERICA, INC or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM NORTH AMERICA, INC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM NORTH AMERICA, INC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ROTAM NORTH AMERICA, INC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ROTAM NORTH AMERICA, INC.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

READ THE ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS. DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep all unprotected persons out of operating areas or vicinity where there may be drift. Do not allow people or pets to touch treated plants until the sprays have dried. Do not enter or allow others to enter treated areas until spray has dried.

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STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Do not contaminate feed, foodstuffs, or drinking water. Do not store or transport near feed or food. Store at temperatures above 32°F. Open dumping is prohibited.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance.

Container Disposal

Nonrefillable container 5 gallons or less: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse promptly after emptying. Then offer for recycling if available or recondition if appropriate, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For Bulk and Mini-Bulk Containers

Refillable Container. Refill this container with pesticides only. Do not reuse this container for any other purpose. Reseal this container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Container Precautions

Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

Container Handling

After emptying, replace valve caps and tightly rebolt top hatch of tank car or truck. Follow Rotam's instructions for the return of bulk containers.

Refill only with ROTAM DIQUAT AG desiccant. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than ROTAM DIQUAT AG desiccant will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident,
call CHEMTREC AT 1-800-424-9300**

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GENERAL PRODUCT INFORMATION

ROTAM DIQUAT AG is a nonvolatile herbicide for use as a preharvest aid to desiccate certain crops in order to facilitate harvesting. ROTAM DIQUAT AG can also be use as a general herbicide to control weeds in noncrop areas and nonbearing crops. ROTAM DIQUAT AG is a contact-type herbicide and requires actively growing green plant tissue to function. Thorough coverage of all green plant tissue is essential for effective control. ROTAM DIQUAT AG is rapidly absorbed by green plant tissue and interacts with the photosynthetic process to produce compounds which destroy plant cells. Herbicidal activity is usually quite rapid with effects visible in a few days.

AGRICULTURAL USE DIRECTIONS

APPLICATION

Since ROTAM DIQUAT AG is a contact-type herbicide, it is essential to obtain complete coverage of the target weed or crop to achieve effective results. Improper application technique and/or application to large, stressed, or mowed weeds will generally result in unacceptable control. Complete coverage is also essential for effective performance in harvest aid applications. See details below for additional information.

Nozzle Selection

The use of flat fan nozzles will result in the most effective application of ROTAM DIQUAT AG. The use of nozzles other than flat fans may result in reduced performance due to inadequate coverage.

Spray Volume

Follow suggested minimum spray volumes listed for each use of ROTAM DIQUAT AG. These are minimum volumes only, and spray volumes should be increased as necessary to obtain complete coverage of the target weed or plant without runoff from the foliage. When spraying less than 20 gals. of spray carrier per acre, target weeds should not exceed 6 inches in height.

SPRAY ADJUVANTS

Always add one of the following:

Nonionic Surfactant (NIS)

Add a NIS containing 75% or greater surface active agent at 0.06-0.5% v/v (1/2-4 pts. per 100 gals.) of the finished spray volume.

Other Adjuvants

Adjuvants other than NIS may be used providing the product meets the following criteria:

- Contains only EPA exempt ingredients.
- Is compatible in mixture. Compatibility may be established through a jar test.
- Is supported locally for use with ROTAM DIQUAT AG through proven field trials and through university and extension programs.

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RATES

Follow suggested rates listed with each use of ROTAM DIQUAT AG. Use the higher label rates when weeds are large or dense. Also, use higher labeled rates for harvest aid when crop vegetation is dense.

APPLICATION TIMING

ROTAM DIQUAT AG should be applied to emerged weeds when they are small. Weeds 1 inch to 6 inches in height are the easiest to control. When weeds have been grazed or mowed, thus removing much of the green foliage, allow the weeds to regrow to a height of 2-4 inches before spraying. For proper application timing of harvest aid applications, refer to each crop for specific use directions. Weeds emerging after application of ROTAM DIQUAT AG will not be controlled or suppressed.

RAINFASTNESS

Because ROTAM DIQUAT AG is rapidly absorbed by green plant tissue, rain occurring 30 minutes after application will have no effect on the activity of ROTAM DIQUAT AG.

ENVIRONMENTAL CONDITIONS

ROTAM DIQUAT AG is active over a wide range of environmental conditions. Cool weather (below 55°F) will slow the activity of ROTAM DIQUAT AG, as will cloudy, overcast weather, but will not affect performance. In dry areas, dust stirred up by high winds or equipment tires can coat target surface and reduce ROTAM DIQUAT AG activity. Avoid applying ROTAM DIQUAT AG in extremely dusty conditions.

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

Where states have more stringent regulations, they should be observed.

Agricultural Aerial Applications

1. Follow label directions to reduce the potential for drift incidents.
2. Do not make aerial applications within or above a surface temperature inversion to avoid unreasonable adverse effects. Applicators may determine presence of an inversion by noting the presence of ground fog, light variable wind, or layering of smoke and dust.
3. Applicators must estimate the prevailing wind speed and direction in the vicinity of the application site prior to and during the application. Measuring wind speed with an anemometer, observing wind speed and direction using an aircraft smoke release system or wind sock or wind vane, or obtaining a report from a representative meteorological station are acceptable methods of estimating wind speed and direction.
4. Apply when prevailing wind speed is 3 to 10 miles/hour.
5. When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

6. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.
7. Many factors, including droplet size and equipment type, determine drift potential at any given speed. Drift reduction technology or other mitigation methods should be employed to reduce drift potential.
8. The boom length must not exceed 75% of the fixed wing span and must be located at least 8 -10 inches below the trailing edge of the fixed wing; the boom length must not exceed 75% of the rotary blade.
9. Release spray at the optimum height from the aircraft for minimizing drift and maximizing deposition in the crop canopy. This height should be no more than 10 feet above the crop canopy unless necessary to ensure flight safety.
10. The boom must be shut off before the aircraft begins to climb at the edge of a field.
11. Apply with nozzles that deliver a coarse spray quality that provide sufficient coverage and control. Coarse spray quality nozzles reduce drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions. Orient nozzles so that the spray is released parallel to the airstream and produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. Nozzles must be oriented backward and parallel to the airstreams and never pointed downward more than 45 degrees. Use the minimum number of nozzles that provide uniform coverage. Use higher flow rate nozzles to apply the highest practical spray volume and do not exceed nozzle manufacturers' recommended pressures.
12. The pesticide should only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, and nontarget crops).

Ground Applications

1. Follow label directions to reduce the potential for drift incidents.
2. Do not make ground applications within a surface temperature inversion when applying near an area requiring protection to avoid an unreasonable adverse effect. Applicators may determine presence of an inversion by noting the presence of ground fog, light variable wind, or layering of smoke and dust.
3. Applicators must estimate the prevailing wind speed and direction in the vicinity of the application site prior to and during the application. Measuring wind speed with an anemometer, observing wind speed and direction using a wind sock or wind vein, or obtaining a report from a local meteorological station are acceptable methods of estimating wind speed and direction.
4. Apply at the nozzle height that produces uniform coverage of the target.
5. Apply when prevailing wind speed is 3 to 10 miles/hour.
6. When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the sprayer upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).
7. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

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8. Many factors, including droplet size and equipment type, determine drift potential at any given speed. Drift reduction technology or other mitigation methods should be employed to reduce drift potential.
9. Use nozzles which deliver a coarser spray quality (droplet size spectrum) at application according to nozzle manufacturer, ASABE, or USDA classification.
10. The pesticide should only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, and nontarget crops).

SPECIFIC USE DIRECTIONS

The following table indicates use pattern, rates, minimum spray volumes, and preharvest interval for specific uses.

Crop	Use Pattern	ROTAM DIQUAT AG Rate Per Acre	Minimum Total Spray Volume Per Acre	Pre-harvest Interval (Days)	Precautions, Restrictions and Comments
Alfalfa (seed crop only)	Preharvest desiccation broadcast	1 ½ - 2 pts. (See precautions section for additional rate information)	Ground: 15 gals. Air: 5 gals.	3	<ul style="list-style-type: none"> • On thin stands of seed alfalfa, use 1 pt. per acre. • Desiccation is complete in 3-10 days. • Do not graze or feed treated forage to livestock. • Do not use seed from treated plants for food, feed, or oil purposes.
Clover (seed crop only)	Preharvest desiccation broadcast	1 ½ - 2 pts.	Ground: 15 gals. Air: 5 gals.	3	<ul style="list-style-type: none"> • Desiccation is complete in 3-10 days. • Do not graze or feed treated forage to livestock. • Do not use seed from treated plants for food, feed, or oil purposes.

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Potato	Preharvest desiccation broadcast	1-2 pts.	Ground: 20 gals. Air: 5 gals.	7	<ul style="list-style-type: none"> Do not apply to drought stressed potatoes. Make a second application if necessary to obtain additional desiccation where vine growth is dense. For improved vine coverage, a 5-day interval between applications. Do not exceed a total of 4 pts. per acre.
Sorghum, Grain (seed crop only)	Preharvest desiccation broadcast	1 ½ - 2 pts.	Ground: 15 gals. Air: 5 gals.	-	<ul style="list-style-type: none"> Apply within 1-2 weeks of harvest and when seeds have not more than 30% moisture. Do not graze or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.
Soybean (seed crop only)	Preharvest desiccation broadcast	1 ½ - 2 pts.	Ground: 15 gals. Air: 5 gals.	-	<ul style="list-style-type: none"> Apply one week before harvest Do not graze or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.

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Tree, Vine, Small Fruit & Vegetable Crops - Nonbearing Acerola (west Indian Chevy) Almonds Apple Apricots Artichokes Asparagus Avocados Bananas Blackberry Blueberry Boysenberry Cherries Coffee Conifers Crabapple	Directed spray	1 1/2-2 pts.	Ground 15 gal.	Do not use for food or feed for one year after application.	<ul style="list-style-type: none">• ROTAM DIQUAT AG can be used during site preparation prior to planting and up to 1 year of harvest.• Retreatment may be necessary for complete control of grasses and older established weeds.• Do not allow spray to contact green stems, foliage, or fruit as injury can occur.• Use a shield or wrap plant when spraying around young trees or vines.• Do not graze treated areas.
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Tree, Vine, Small Fruit & Vegetable Crops - Nonbearing (continued) Cranberry Dates* Dewberry Elderberry Figs Filberts Ginseng Gooseberry Grapes Grapefruit Guava Huckleberry Jojoba Kiwi Lemons Limes Loganberry Macadamia Mango Nectarines Olives Oranges Papayas Passion Fruit Peaches Pears Pecans Persimmons Pistachios Plantains Plums Pomegranates Prunes Raspberry Tangelos Tangerines Walnuts					
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The following table indicates the use pattern and rates for noncrop or nonplanted areas.

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Other Uses	Use Pattern	ROTAM DIQUAT AG Rate	Precautions, and Restrictions
<p><u>Noncrop or Nonplanted Areas on Farms</u></p> <p>Fence Lines, Farmyards, Farm Buildings, Fuel Storage Areas, Barrier Strips, Equipment Areas, and Dry (non-flooded) Areas around ponds, lakes, and drainage ditches on farms</p>	<p>Broadcast</p> <p>Spot Treatment</p>	<p>1-2 pts. in a minimum of 15 gals of water per Acre</p> <p>1-2 qts. plus the labeled rate of a 75% or greater nonionic surfactant per 100 gals. water or 0.75 oz. (22 mL) plus the labeled rate of a 75% or greater nonionic surfactant per 1 gal. of water</p>	<ul style="list-style-type: none"> • Apply for full coverage and thorough weed contact. • Retreatment may be necessary to control grasses and established weeds. • Avoid spray contact with foliage of food crops or ornamental plants or other desirable vegetation. • Add the labeled rate of 75% or greater nonionic surfactant to the finished spray volume.

AGRICULTURAL AQUATIC USE DIRECTIONS

Necessary approval and/or permits should be obtained prior to application if required. Consult the responsible State Agencies (i.e. Fish and Game Agencies or Department of Natural Resources). Treatment of dense weed areas may result in oxygen loss from decomposition of dead weeds. This loss of oxygen may cause fish suffocation. Therefore, treat only $\frac{1}{3}$ - $\frac{1}{2}$ of the water body area at one time and wait 14 days between treatments.

For application only to still water (i.e. farm ponds, farm lakes, and farm drainage ditches) where there is minimal or no outflow to public waters.

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Treated water may be used according to the following table or until such time as an approved assay (example: PAM II Spectromatic Method) shows that the water does not contain more than the designated maximum contaminant level goal (MCLG) of 0.02 mg/l. (ppm) of diquat dibromide (calculated as the cation):

Water Use Restrictions Following Application with ROTAM DIQUAT AG Desiccant (Days)

Application Rate	Drinking	Fishing and Swimming	Livestock Consumption	Spray Tank Applications** and Irrigation to Turf and Ornamentals	Spray Tank Applications** and Irrigation to Food Crops
2 gal./surface acre	3 days	0	1 day	3 days	5 days
1 gal./surface acre	2 days	0	1 day	2 days	5 days
0.75 gal./surface acre	2 days	0	1 day	2 days	5 days
0.50 gal./surface acre	1 day	0	1 day	1 day	5 days
Spot Spray* (< 0.5 gal./surface acre)	1 day	0	1 day	1 day	5 days

* Rates refer to total surface area.

** For preparing agricultural sprays for food crops, turf or ornamentals (to prevent phytotoxicity), do not use water treated with ROTAM DIQUAT AG desiccant before the specified time periods. When the contents of more than one spray tank is necessary to complete a single aquatic application, no water holding restrictions apply between the consecutive spray tanks.

No applications are to be made in areas where commercial processing of fish, resulting in the production of fish protein concentrate or fish meal, is practiced. Before application, coordination and approval of local and/or State authorities must be obtained.

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Apply ROTAM DIQUAT AG Desiccant in accordance with the following table:

Weed Species	Subsurface or Bottom Placement gals/surface acre*	Surface gals/surface acre*
Bladderwort (<i>Utricularia</i> spp.)	1-2	2
Coontail (<i>Ceratophyllum demersum</i>)	2	2
Elodea (<i>Elodea</i> spp.)	2	2
Naiad (<i>Najas</i> spp.)	1-2	2
Pondweeds ¹ (<i>Potamogeton</i> spp.)	2	2
Watermilfoils (<i>Myriophyllum</i> spp.)	1-2	2
Hydrilla (<i>Hydrilla verticillata</i>)	2	2
Waterlettuce ² (<i>Pistia stratiotes</i>)	N	0.5-0.75
Waterhyacinth ² (<i>Eichhornia crassipes</i>)	N	0.5-0.75
Pennywort ³ (<i>Hydrocotyle</i> spp.)	N	0.5-0.75
Frog's Bit ⁴ (<i>Limnobium spongia</i>)	N	0.5-0.75
Salvinia ² (<i>Salvinia</i> spp.)	N	0.5-0.75
Duckweed ⁴ (<i>Lemna</i> spp.)	N	1
Cattails ³ (<i>Typha</i> spp.)	N	1-2
Algae ⁵ (<i>Spirogyra</i> spp. & <i>Pithophora</i> spp.)	1-2	2

*For water less than or equal to 2 ft. in average depth of treatment area, use a maximum of 1 gallon of ROTAM DIQUAT AG desiccant per surface acre. Lowest rates should be used in shallow areas where the water depth is considerably less than the coverage depth of the entire treatment area, for example, shallow shoreline area. At water temperatures below 50°-60°F efficacy and immediacy of results may be reduced.

1. ROTAM DIQUAT AG desiccant controls *Potamogeton* species except Richardson's pondweed (*P. richardsonii*). For control of *P. robbinsii*, applications must be made when the plants are in the early stages of growth such as in spring and early summer.
2. For salvinia, water lettuce and water hyacinth, use the labeled rate of ROTAM DIQUAT AG desiccant in 75-200 gals. water plus the labeled rate of a 75% or greater nonionic surfactant per acre for surface sprays and for aerial application for water lettuce and water hyacinth control, apply the labeled rate of ROTAM DIQUAT AG desiccant in 10-24 gals. water plus the labeled rate of a 75% or greater nonionic surfactant per acre.
3. For pennywort and cattail control, apply in 50-150 gals. of water plus the labeled rate of a 75% or greater nonionic surfactant per acre for full coverage and thorough weed contact. Repeat treatments may be necessary to control regrowth. For best results, apply before flowering (cattail).
4. For duckweed control, apply as an overall spray in 50-150 gals. of water plus the labeled rate of a 75% or greater nonionic surfactant per acre. Retreatment may be necessary for plants missed in previous applications and regrowth.
5. For suppression of certain filamentous algae species including *Spirogyra* and *Pithophora*, apply according to the submersed use directions. Not for use in California.

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Application

In mixed weed populations, use the high rate of application as indicated by weeds present.

Subsurface Applications

Where the submersed weed growth, especially Hydrilla, has reached the water surface, apply either in a water carrier or an invert emulsion through boom trailing hoses carrying nozzle tips to apply the dilute spray below the water surface to insure adequate coverage.

Bottom Placement

Where the submersed weeds, especially Hydrilla, Bladderwort, and Coontail growth have reached the water surface or where water is slowly moving through the submersed weed growth that has reached the water surface, especially Hydrilla, Bladderwort, and Coontail, control may be enhanced when applied in an invert emulsion carrier injecting diluted ROTAM DIQUAT AG desiccant near the bottom with weighted hoses. The addition of a copper-based algaecide will improve control. Where algae are present along with the submersed weeds, pretreatment with copper-based algaecide at recommended rates is advised for best results.

Surface Application

For submerged aquatic weeds, apply ROTAM DIQUAT AG desiccant either as concentrate slowly poured directly from the container in strips or as a spray in sufficient carrier. Applications should be made to ensure complete coverage of the weed areas. In mixed weed populations, use the high rate of application as indicated by weeds present.

LIMITATIONS AND PRECAUTIONS (Terrestrial and Aquatic Uses)

Direct spray contact or drift of ROTAM DIQUAT AG will cause severe plant injury or death. Avoid contact of desirable vegetation.

Weeds emerging after application of ROTAM DIQUAT AG will not be controlled or suppressed.

Retreatment may be necessary to control large weeds or established weeds.

Use of dirty or muddy water for ROTAM DIQUAT AG dilution may result in reduced control.

Application to muddy water may result in reduced control. Minimize creating muddy water during application. (Aquatic Uses)

Avoid applying under conditions of high wind, water flow, or wave action. (Aquatic Uses)

Do not apply this product through any type of irrigation system.

Rinse all spray equipment thoroughly with water after use.

Registered: 07/13/2009

Amended:

Manufactured for:

Rotam North America, Inc.

1400 NW 107th Avenue, Suite 310

Miami, FL 33172

1-866-927-6826

Net Contents: TBD

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[Back Booklet Label/Remains on Container when booklet is removed]

Rotam Diquat AG

TO PREVENT ACCIDENTAL POISONING, NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS AND USE STRICTLY IN ACCORDANCE WITH ENTIRE LABEL.

Active Ingredient:

Diquat dibromide [6,7-dihydrodipyrdo (1,2-a:2',1'-c) pyrazinediium dibromide].....	37.3%
Other Ingredients:.....	62.7%
Total:	100.0%

Contains 2 lbs. diquat cation per gal. as 3.73 lbs. salt per gal.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements and Directions For Use inside booklet.

EPA Reg. No. 83979-2

EPA Est No. [tba]

Manufactured for:
Rotam North America, Inc.
1400 NW 107th Avenue, Suite 310
Miami, FL 33172
1-866-927-6826

NET CONTENTS:

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AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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FIRST AID	
If inhaled	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call CHEMTREC 1-800-424-9300.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes, skin or clothing.

Environmental Hazards

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

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STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Do not contaminate feed, foodstuffs, or drinking water. Do not store or transport near feed or food. Store at temperatures above 32°F. Open dumping is prohibited.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance.

Container Disposal Statement

Nonrefillable container 5 gallons or less: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse promptly after emptying. Then offer for recycling if available or recondition if appropriate, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For Bulk and Mini-Bulk Containers

Refillable Container. Refill this container with pesticides only. Do not reuse this container for any other purpose. Reseal this container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Container Precautions

Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

Container Handling

After emptying, replace valve caps and tightly rebolt top hatch of tank car or truck. Follow Rotam's instructions for the return of bulk containers.

Refill only with Rotam Diquat AG. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Rotam Diquat AG will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident,
call CHEMTREC AT 1-800-424-9300**